

CLAIMS

1. Process for deterministic transmission of asynchronous data in packets, in which data arriving asynchronously is stored in batteries (11) as and when it arrives, the said process being typified in that it comprises the following stages:

- reception of data contained in a set of batteries in one or several packeting modules (13), start of packeting, packeting with sorting and enhancement of data, end of packeting and sending of the made-up packet,

- stoppage of packet make-up in the course of realization in a packeting module (13) when a message composition module (15) needs this packet, transmission of the packet thus made up, and start of the realization cycle of a new packet,

- recovery one after another of the packets thus created, in a predefined order, in the message composition module (15),

- setting of the message, made up in the message composition module (15) to the electrical format in the protocol used for the transmission.

2. Device for deterministic transmission of asynchronous data in packets comprising:

- at the least one input module (10) receiving the input data,

- batteries (11) receiving digital data coming from this input module,

- several packeting modules (13) each connected to at least one battery (11),
- at the least one control module for battery dump (14) monitored by at least one packeting module (13),
- 5 - a message composition module (15) receiving the outputs of all the packeting modules (13) and able to send to each of them an order for end of packet make-up,
- a module for formatting packets (16),
- 10 - an output module (17) capable of issuing each made-up packet on a transmission line (18).

3. Use of the process according to claim 1, in data acquisition and real-time processing systems for
15 test installations of new aeroplanes.